

REMARKS

Claim 10 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al. (U.S. 6,317,173) in further view of Moon (U.S. 5,942,310). Applicant respectfully traverses this rejection because neither of the cited references, whether taken alone or in combination, discloses or suggests a second storage capacitor electrode made of the same layer as the data wirings, as in claim 10 of the present invention, as amended.

As previously discussed, Jung discloses a liquid crystal display utilizing a storage electrode 430 and a data line/wiring 600. (See Figs. 2-3). As also discussed, Jung specifically teaches that a storage electrode 420, which is a part of the storage electrode line 430, is made of the same layer as a gate line/wiring 400. (See col. 6, lines 39-48). Jung even teaches that the data line 600 is not formed simultaneously with the storage electrode 420, but only on top of at least one intervening layer (insulating film 500) which is formed on top of the gate line 400. (See col. 6, lines 56-63). In other words, Jung clearly teaches that the storage electrode 420, which electrode the Examiner asserts is analogous to the second storage capacitor electrode of the present invention, is not made of the same layer as the data line, but actually the gate line.

In contrast, claim 10 of the present invention has been amended to recite, among other things, that the second storage capacitor electrode is made of the same layer as the data wirings. Accordingly, claim 10 now recites just the opposite configuration to the Jung reference, which specifically teaches that the storage electrode is part of the gate wiring.

Jung therefore teaches away from the present invention. Any reference which teaches away from a presently claimed invention cannot form the basis of a rejection based on obviousness. Accordingly, the Section 103 rejection based at least in part on Jung is respectfully traversed, and should be withdrawn.

Furthermore, Moon similarly teaches that both its source electrodes 8 and drain electrodes 9 are formed separately from the storage electrode 4, with at least one insulating layer 7 intervening there between. (See col. 4, lines 10-35; Figs. 2A – 2E). Similar to the above discussion therefore, Moon also teaches away from the present invention by specifically teaching that the storage electrode is not made of the same layer as the data wirings. Accordingly, Moon also may not form the basis of a rejection based on obviousness, and the rejection should be withdrawn for at least these reasons as well.

Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (U.S. 6,088,071) in further view of Moon. Claim 11 has also been amended to recite that the second storage capacitor electrode is made of the same layer as the data wirings, and this rejection is therefore respectfully traversed for reasons similar to those discussed above. The Examiner specifically acknowledges on page 6 of Paper No. 15 that “the storage capacitor electrodes and data lines are not patterned from the same layer” in Yamamoto. Accordingly, neither Moon (as discussed above) nor Yamamoto teaches or suggests these features of the present invention, and therefore this rejection of claim 11 should also be withdrawn.

Claims 12-13 and 15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushima (U.S. 5,917,563) in further view of Ikeda et al. (U.S. 5,182,661). Applicant respectfully traverses this rejection because neither of the cited references, whether taken alone or in combination, discloses or suggests that the second storage capacitor electrode has a peripheral area which overlaps an entire perimeter area of the pixel electrode, when observed from a direction perpendicular to the substrates, as now recited in independent claim 12 of the present invention, as amended.

Fig. 8 of Matsushima clearly shows that the upper electrode 51a is not shown to have a peripheral area overlapping the entire perimeter area of the pixel electrode 25. Moreover, Fig. 4A of Ikeda does not show any peripheral portion of the storage capacitor electrode 62 overlapping a perimeter area of the pixel electrode 22. Accordingly, because neither reference teaches or suggests this feature of the present invention, the Section 103 rejection is respectfully traversed for at least these reasons.

Claims 13 and 15 depend from independent claim 12, and therefore contain all of the features of the base claim, plus additional features. Accordingly, the rejection of claims 13 and 15 based on a combination of Matsushima with Ikeda is respectfully traversed for at least the reasons discussed in traversing the rejection of independent claim 12.

For all of the foregoing reasons, Applicant submits that this Application, including claims 10-13 and 15, is in condition for allowance, which is respectfully requested.

The Examiner is invited to contact the undersigned Attorney if an interview would expedite prosecution..

Respectfully submitted,

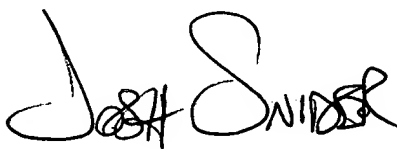
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